



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re the application of: BARNES, Glenn *et al.*

Serial No.: 10/071411

Filed: February 7, 2002

For: *DETECTION OF POLYMORPHISMS IN THE HUMAN 5-LIPOXYGENASE GENE*

Attorney Docket No.: MRI-021

Group Art Unit: 1637

Examiner: Wilder, Cynthia B.

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

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DeAnn F. Smith, Esq.

Please Print Name of Person Signing

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Dear Sir:

Applicants and their Attorney are aware of the following publications and information, listed on the attached PTO Form SB/08, and in accordance with 37 CFR §1.97 hereby submit these publications for the Examiner's consideration. A copy of each cited publication is enclosed.

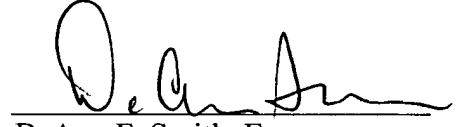
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In accordance with 37 CFR §1.97(d)(2) and §1.17(p), please charge the \$180.00 submission fee to our Deposit Order Account No. 12-0080. Please charge any necessary additional fees or credit any overpayments to our Deposit Order Account No. 12-0080.

Respectfully submitted,  
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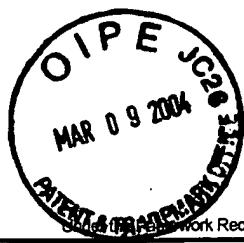
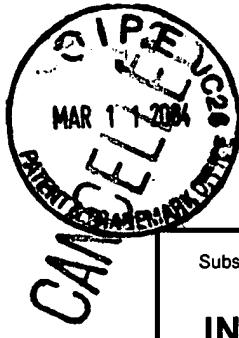


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Substitute for form 1449A/B/PTO				<b>Complete if Known</b>	
				Application Number	10/071411
				Filing Date	February 7, 2002
				First Named Inventor	Barnes, Glenn
				Art Unit	1637
				Examiner Name	Wilder, Cynthia B.
Sheet	1	of	3	Attorney Docket Number	MRI-021

<b>U.S. PATENT DOCUMENTS</b>					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)	MM-DD-YYYY		
	A1	5,750,565	05-12-1998	Cai <i>et al.</i>	
	A2	6,090,547	07-18-2000	Drazen <i>et al.</i>	

<b>FOREIGN PATENT DOCUMENTS</b>					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		
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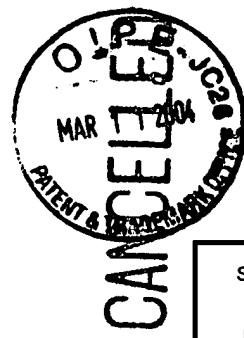
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<b>NON PATENT LITERATURE DOCUMENTS</b>					
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
	A3	Balcarek, J.M. <i>et al.</i> "Isolation and characterization of a cDNA clone encoding rat 5-lipoxygenase." <i>The Journal of Biological Chemistry</i> 263(27):13937-41 (1988).			
	A4	Barnard, D.F. <i>et al.</i> "An evaluation of the Coulter VCS differential counter." <i>Clin. lab. Haemat.</i> 11(3):255-66 (1989).			
	A5	Cyrus, T. <i>et al.</i> "Disruption of the 12/15-lipoxygenase gene diminishes atherosclerosis in apo-E-deficient mice." <i>The Journal of Clinical Investigation</i> 103(11):1597-1604 (1999).			
	A6	Dixon, R.A.F. <i>et al.</i> "Cloning of the cDNA for human 5-lipoxygenase." <i>Proc. Natl. Acad. Sci. USA</i> 85(2):416-20 (1988).			
	A7	Dwyer, J.H. <i>et al.</i> "Arachidonate 5-lipoxygenase promoter genotype, dietary arachidonic acid, and atherosclerosis." <i>The New England Journal of Medicine</i> 350(1):29-37 (2004).			
	A8	Foresi, A. <i>et al.</i> "Eosinophils, mast cells, and basophils in induced sputum from patients with seasonal allergic rhinitis and perennial asthma: relationship to methacholine responsiveness." <i>J. Allergy Clin. Immunol.</i> 100(1):58-64 (1997).			
	A9	Funk, C.D. <i>et al.</i> "Characterization of the human 5-lipoxygenase gene." <i>Proc. Natl. Acad. Sci. USA</i> 86(8):2587-91 (1989).			
	A10	George, J. <i>et al.</i> "12/15-Lipoxygenase gene disruption attenuates atherogenesis in LDL receptor-deficient mice." <i>Circulation</i> 104:1646-50 (2001).			

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	2	of	3	Attorney Docket Number	MRI-021
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### Complete if Known

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Art Unit	1637
Examiner Name	Wilder, Cynthia B.

### NON PATENT LITERATURE DOCUMENTS

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B1		Hoshiko, S. et al. "Characterization of the human 5-lipoxygenase gene promoter." <i>Proc. Natl. Acad. Sci. USA</i> 87(23):9073-7 (1990).	
B2		In, K.H. et al. "Naturally occurring mutations in the human 5-lipoxygenase gene promoter that modify transcription factor binding and reporter gene transcription." <i>J. Clin. Invest.</i> 99(5):1130-7 (1997)	
B3		Israel, E. et al. "The effect of inhibition of 5-lipoxygenase by zileuton in mild-to-moderate asthma." <i>Annals of Internal Medicine</i> 119(11):1059-66 (1993).	
B4		Jatakanon, A. et al. "Changes in sputum eosinophils predict loss of asthma control." <i>Am. J. Respir. Crit. Care Med.</i> 161(1):64-72 (2000).	
B5		Khachigian, L.M. et al. "Interplay of Sp1 and Egr-1 in the proximal platelet-derived growth factor A-chain promoter in cultured vascular endothelial cells." <i>The Journal of Biological Chemistry</i> 270(46):27679-86 (1995).	
B6		Li, L. et al. "Positive regulation of human $\alpha$ 1 (I) collagen promoter activity by transcription factor Sp1." <i>Gene</i> 164(2):229-34 (1995).	
B7		Lönnqvist, K. et al. "Eosinophil markers in blood, serum, and urine for monitoring the clinical course in childhood asthma: impact of budesonide treatment and withdrawal." <i>J. Allergy Clin. Immunol.</i> 107(5):812-7 (2001).	
B8		Matsumoto, T. et al. "Molecular cloning and amino acid sequence of human 5-lipoxygenase." <i>Proc. Natl. Acad. Sci. USA</i> 85(1):26-30 (1988).	
B9		Matsumoto, T. et al. "Correction to Proc. Natl. Acad. Sci. USA 85(1):26-30 (1988)." <i>Proc. Natl. Acad. Sci. USA</i> 85(10):3406 (1988).	
B10		Moffitt, J.E. et al. "Management of asthma in children." <i>American Family Physician</i> 50(5):1039-50, 1053-5 (1994).	
B11		O'Byrne, P.M. "Leukotrienes in the pathogenesis of asthma." <i>Chest</i> 111(2 Suppl):27S-34S (1997).	
B12		Persson, M.G. et al. "Positive end-expiratory pressure ventilation elicits increases in endogenously formed nitric oxide as detected in air exhaled by rabbits." <i>Anesthesiology</i> 82(4):969-74 (1995).	
B13		Powell, W.S. et al. "Eotaxin and RANTES enhance 5-oxo-6,8,11,14-eicosatetraenoic acid-induced eosinophil chemotaxis." <i>J. Allergy Clin. Immunol.</i> 107(2):272-8 (2001).	
B14		Samuelsson, B. "Leukotrienes: mediators of immediate hypersensitivity reactions and inflammation." <i>220(4597):568-75 Science</i> (1983).	
B15		Samuelsson, B. et al. "Leukotrienes and lipoxins: structures, biosynthesis, and biological effects." <i>Science</i> 237(4819):1171-6 (1987).	

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	C1	Silverman, E. et al. "Pharmacogenetics of the 5-lipoxygenase pathway in asthma." <i>Clinical and Experimental Allergy</i> 28 Suppl 5:164-70 (1998).	
	C2	Tang, J-L. et al. "Role of Sp1 in transcriptional activation of human nitric oxide synthase type III gene." <i>Biochemical and Biophysical Research Communications</i> 213(2):673-80 (1995).	
	C3	Ulrik, C.S. "Eosinophils and pulmonary function: an epidemiologic study of adolescents and young adults." <i>Annals of Allergy, Asthma, &amp; Immunology</i> 80(6):487-93 (1998).	
	C4	Urasaki, T. et al. "Pivotal role of 5-lipoxygenase in the activation of human eosinophils: platelet-activating factor and interleukin-5 induce CD69 on eosinophils through the 5-lipoxygenase pathway." <i>Journal of Leukocyte Biology</i> 69(1):105-12 (2001).	
	C5	Wariishi, S. et al. "A SP1 binding site in the GC-rich region is essential for a core promoter activity of the human endothelial nitric oxide synthase gene." <i>Biochemical and Biophysical Research Communications</i> 216(2):729-35 (1995).	

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